## IC Recorder

Operating Instructions

Owner's Record

The model number is located at the rear and the serial number is located inside the battery compartment. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product. Model No. ICD-MX20 Serial No.

## IC RECORDER ICD-MX20

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http://www.sony.net/

#### For the customers in the USA

#### **INFORMATION**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

Reorient or relocate the receiving antenna. Increase the separation between the equipment and

Consult the dealer or an experienced radio/TV You are cautioned that any changes or modifications not

- Connect the equipment into an outlet on a circuit

different from that to which the receiver is connected

expressly approved in this manual could void your authority to operate this equipment.

### For "Memory Stick"

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired

If you have any questions about this product, you may call: Sony Customer Information Services Center 1-800-222-7669 or http://www.sony.com/

#### **Declaration of Conformity** Trade Name:

Model: ICD-MX20 Responsible Party: Sony Electronics Inc 16530 Via Esprillo, San Diego, CA 92127 U.S.A.

Telephone Number: 858-942-2230 This device complies with part 15 of the FCC Rules Operation is subject to the following two conditions (1) This device may not cause harmful interference, and (2) this device must accept any interference eceived, including interference that may cause ındesired operation.

### **Notice for users**

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Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice.

The software described herein may also be governed by the terms of a separate user license agreemen

• This software is for Windows and cannot be used for

Macintosh. • The supplied connecting cable is for the IC recorders

ICD-MX20. You cannot connect other IC recorders.

### **Information**

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY

#### **Disposal of Old Electrical & Electronic Equipment (Applicable in the European** Union and other European countries with separate collection systems)



treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and humar health, which could

This symbol on the product

or on its packaging indicates

that this product shall not be

otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the

The validity of the CE marking is restricted to only those countries where it is legally enforced, mainly in the countries EEA (European Economic Area).

#### Notice for the customers in the countries applying EU Directives

The manufacturer of this product is Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfi nger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

# **Troubleshooting**

### Before taking the unit for repair, check the following

sections. Should any problem persist after you have made these checks, consult your nearest Sony dealer.

#### The unit does not operate. • The batteries have been inserted with incorrect

The batteries are weak

#### • The buttons are locked with the HOLD switch. (If you press any button, "HOLD" will appear for 3 seconds.) The "Memory Stick" is not recognized. The number of folders automatically created in the

"Memory Stick" is less than 5. Since the "Memory Stick" contains image data or other files, the memory required for creating initial folders is insufficient. Use the Windows Explorer or other tool to delete unnecessary files or use "Format" menu of the unit to format the "Memory Stick".

### No sound comes from the speaker

 The headphones are plugged in. The volume is turned down completely

### Sound comes from the speaker even when the

headphones are plugged in. If you plug in the headphones not securely during playback, the sound may come from the speaker. Unplug the headphones and then insert them securely

#### The OPR indicator does not light • The "LED" in the menu is set to "OFF". Display the

menu and set the "LED" to "ON". You cannot start recording. • The memory is full. Erase some of the messages. Or

use the Digital Voice Editor to save the IC recorder essages to the hard disk of your PC. You can also use the "Memory Stick" with sufficient capacity • The write-protect switch on the inserted "Memory

Stick" is set to "LOCK". 999 messages have already been recorded in the selected folder. Select another folder or erase some of

#### You cannot erase a message • The message or the folder containing the message is

message or the folder using Windows Explorer and remove the check for "Read-only" under "Properties" • The write-protect switch on the inserted "Memory Stick" is set to "LOCK" You cannot add a recording or an overwrite

set to "Read-only" in the computer. Display the

### recording to the previously recorded message.

• The remaining memory is too short. The overwritten part will be deleted after the overwriting part finishes recording. Therefore, you can only overwrite within the remaining recording time. • At a factory setting, "Add/Over" (additional/

overwrite recording) is set to "OFF". Display the menu and set the "Add/Over" to "Add REC" or "Overwrite"

### Recording is interrupted.

• The advanced VOR (Voice Operated Recording) Recording is interrupted (when recording from an external device).

· If you use an audio connecting cable without a resistor to connect the sound source to the IC recorder, sound may be recorded interrupted. Make sure to use a resistance audio connecting cable.

### Noise is heard.

• An object, such as your finger, etc., accidentally rubbed or scratched the unit during recording so that noise was recorded.

• The unit was placed near an AC power source, a fluorescent lamp or a mobile phone during recording or playback.

 Plug of the connected microphone was dirty when recording. Clean the plug.

#### Headphones plug is dirty. Clean the plug. Recording level is low.

#### • "Mic Sense" (microphone sensitivity) is set to "Low". Display the menu and set "Mic Sense" to "High"

• If it is difficult to hear small sound of a recorded nessage, slide the VOICE UP switch to "ON".

Playback sound may become more audible. Playback speed is too fast or too slow. • The playback speed is adjusted in the "DPC" in the

#### menu. Slide the DPC switch to "OFF" or display the "DPC" in the menu and adjust the playback speed.

"--Y--M--D" or "--:-" is displayed. • You have not set the clock. Display the "Date&Time" in the menu and set the clock

#### "--Y--M--D" or "--:--" is displayed as the recorded date.

• The date and time of recording will not be displayed if you recorded the message when the clock was not set. Display the "Date&Time" in the menu and set the

### There are fewer menu items in the menu

mode. • There are some menu items which are not displayed while the set is in recording or playback mode.

## A character in a folder or message name is

displayed as " $\square$ ". • The unit cannot support and display some characters

which are entered using the supplied "Digital Voice Editor" software.

#### Messages are not sorted in order of the number of priority marks in a folder.

• Unless you sort messages using the supplied "Digital Voice Editor" software, messages are displayed in the unit in the same way as specified in the computer. Sort again in the order of the number of priority marks in the computer using the supplied "Digital Voice

#### The remaining time displayed in the display window is shorter than that displayed in the supplied "Digital Voice Editor" software.

• The unit requires a certain amount of memory for system operation. That amount is subtracted from the remaining time, which is the reason for the difference. The battery life is short.

• The battery life mentioned in "Step 1: Installing the Batteries" is based on playback through internal speaker with the medium volume level (using Sony alkaline batteries LR03(SG)). The battery life may shorten depending on the operation of the unit.

#### "ACCESS" display does not disappear. • If the unit is required to process excessive amount of

data, "ACCESS" may be displayed for an extended period of time. This is not a malfunction of the unit Wait until the message disappears.

#### The unit does not operate correctly. Take out the batteries and insert them again with correct polarity.

You cannot connect the unit to the PC. • Refer to the "Digital Voice Editor 2" operating

Please note that recorded messages may be erased during service or repair work.

### **▶**Getting started Step 1: Installing the Batteries

1 Slide and open the battery

2 Insert two LR03 (size AAA) alkaline batteries with correct polarity, and close the lid. Make sure to insert batteries into the unit from the - end first.

When you insert batteries for the

first time, or when you insert

batteries after the unit has been

period of time, "Set Date&Time"

Setting the Clock" to set the date

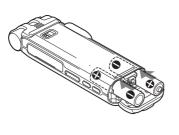
If the battery compartment lid is

8 hr.

illustrated.

without batteries for a certain

appears. Please refer "Step 2



Notes on batteries

· Do not use manganese batteries for

· When you are not going to use the

remove the batteries to prevent

damage from battery leakage and

When you insert the batteries

purchasing (initializing the

"ACCESS" appears in the display

window and the internal memory is

initialized automatically to create 5

folders (FOLDER01 to FOLDER05).

Notes while "ACCESS" appears

The unit is accessing data while

"ACCESS" appears in the display

or flashes in red or orange. While

supplied). Doing so may damage

"ACCESS" may be displayed for an

extended period of time. This is not

a malfunction of the unit. Wait until

accessing, do not remove the

batteries or AC adaptor (not

• If the unit is required to process

excessive amount of data,

the message disappears

Note on setting the clock

stop mode.

Set the clock while the set is in the

To display the clock setting

window and current time

You can display the clock setting

window to set the date and time of

▶ REC Mode

اں⊫⊪

2 Press ▲/▼ to select 🛱 (Preferences)

3 Press **△/▼** to select "Date&Time".

right bottom of the display

**4**To set the clock, press ► to

display the "Date&Time" window

the "Step 2: Setting the Clock".

This unit does not have a power on/

Maximum recording time\*

the folders is as follows. You can

record messages for the maximum

recording time in a single folder.

Approx. 1 hr. 25 min.

Approx. 2 hr. 45 min.

Approx. 4 hr. 20 min.

ST: Standard play stereo recording

recording mode /SP: Standard play

mode/STLP: Long play stereo

monaural recording mode/LP:

Long play monaural recording

The maximum number of the

You can create the maximum of 340

folders each in the built-in memory

To record in better sound quality,

Before making a long recording, be

sure to check the battery indicator.

The maximum recording time and

the number of messages you can

To avoid replacing batteries during

built-in microphone if you connect

an external microphone to the

long time recording, use the AC

power adaptor (not supplied).

You cannot record through the

(microphone) connector

**Expanding the memory** 

You can expand the memory by inserting a "Memory Stick Duo" or

"Memory Stick PRO Duo" into the

You can use both the built-in memory

**1** Press ► ( ) to display the folders

3 Press ▲ or ▼ to select the "Memory

Stick" drive (🖺) or the built-in

"Memory Stick" drive ((\_\_\_))

The folders of the selected drive are

(If you keep pressing  $\blacktriangle$  or  $\blacktriangledown$  , the

display switches to the folders of

automatically in response to

the sound — Advanced VOR

Set "VOR" in the menu to "ON"

While the OPR indicator flashes or

lights in red or orange, do not

remove the batteries or the AC

adaptor (not supplied). Doing so

· Noise may be recorded if an object,

accidentally rubs or scratches the

displayed, where you can select one

and the "Memory Stick" by switching

MEMORY STICK slot. (See the

Switching the drives

in the current drive

memory drive (17).

□ □FOLDER01

FOLDER03

**■**☐ [000/000

by pressing ▲ or ▼.

Starting recording

Notes on recording

may damage the data.

such as your finger, etc.,

unit during recording.

another drive.)

TFOLDERO?

reverse side.)

make varies depending on the

select the ST or STLP mode.

folders when each folder

contains one message

and the "Memory Stick".

Notes before recording

conditions of use.

Approx. 11 hr. 45 min.

(built-in memory)

Recording modes\*\*

In continuous recording

\*\*Recording modes:

STLP

off switch. The display is shown at all

and follow the steps 1 through 4 of

The current time is displayed in the

and then press ►■.

∰ Mic Sense

Display
Date&Time

🔁 Веер

check the current time:

window or the OPR indicator lights

for the first time after

memory)

the data.

unit for an extended period of time,

· Do not charge dry batteries

accidentally detached, attach it as

(hr.: hours/min.: minutes)

Replacing the batteries The battery indicator on the display window shows the battery condition Replace both of the two batteries with new ones.

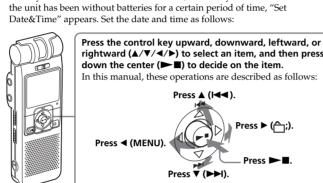
"Replace Batteries" appears and the unit will stop operation. Battery life\* (Using Sony alkaline batteries LR03 (SG)) STLP 9 hr. 30 min. 9 hr. 30 min. 10 hr. 30 min. In recording: 8 hr.

f In continuous recording/playback In approximate hours and minutes \* When playing back through the internal speaker with the medium volume level

\* The battery life may shorten depending on the operation of the unit. **Using on house current** Connect the AC power adaptor (not To DC IN 3V jack supplied) to the DC IN 3V jack of the unit and to the wall outlet. Do not use any other AC power adaptor.

## Step 2: Setting the Clock

You need to set the clock to use the alarm function or record the date and time When you insert batteries for the first time, or when you insert batteries after



1 Press **▲**/▼ to select the digits for the year. ▲: to decrease the number ▼: to increase the number

**2** Press ►■. The month digits will flash. 3 Repeat steps 1 and 2 to set the month, day, hour, and then minutes in sequence. To select a previous or next item Press ◀ for the previous item or ▶ for the next

If you do not press ▶■ for more than one minute, the clock setting mode is cancelled and the window will return to normal display.

4 Press ■STOP to return to the normal

Date&Time 05 y 5 m 15 d 15:**30 △ 000**/000

Date&Time

0:00

\_\_\_\_\_

### **▶**Basic Operations

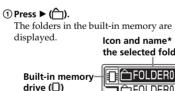
## **Recording Messages**

You can record the maximum of 999 messages in each folder of the initially 5 folders (FOLDER01 to FOLDER05). In all the folders of the built-in memory, you can record Since a newly recorded message is automatically added behind the last recorded message, you can start recording quickly without searching for the end of the last

Message 1 Message 2 Blank space Newly recorded message







Icon and name\* of the selected folder FOLDER01 ☐FOLDER02 △FOLDER03

\* You can display a long folder name by

drive (□) [000/00

1) Press OIIREC/PAUSE during the stop

② Press ▲ or ▼ to select the folder in which you wish to record messages.

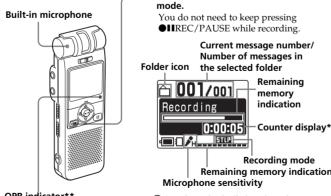
③Press ►■.



indication

Recording mode

# Start recording.



2 Speak to the built-in microphone (lights in red during recording.)

\* The display selected with the "Display" in the menu appear \*\*When the "LED" in the menu is set to "OFF", the OPR indicator turns off

То	Do this
stop recording	Press STOP.  The unit stops at the beginning of the current recording. If you do not change the folder after you stop recording, the next time you record you will record in the same folder.
pause recording*	Press •IIREC/PAUSE.  During recording pause, the OPR indicator flashes in red and "REC Pause" flashes in the display window.
release pause and resume recording	Press •IIREC/PAUSE. Recording resumes from that point.
listen to the current recording	Press ■STOP to stop recording, then press ▶■.
review the current recording instantly	Press ►■ during recording.
review during recording	Keep pressing ▲ (I◄◄) during recording or recording pause

Recording stops and you can search backwards

while listening to fast playback sound. After you

You can add an overwrite recording from that point.

release the key, playback starts from that point.

\* About one hour after you pause recording, recording pause is automatically released and the unit goes into the stop mode

# Playing Back Messages

When playing back a previously recorded message, start from Step 1. When playing back a message you have just finished recording, start from Step 2-2.



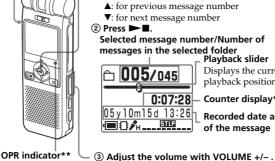
# Follow the step 2 in "Recording Messages".

**Select the message and start** 



during playback.)

playback. 1 Press ▲ or ▼ to display the desired message



Recorded date and time of the message Adjust the volume with VOLUME +/-. The display selected with the "Display" in the menu Vo I ume

Displays the current

\*When the "LED" in the menu

is set to "OFF", the OPR

playback position.

The unit plays all the messages in a folder continuously and stops at the beginning of the last message in the folder. (You change the "Play Mode" in the menu so that the unit plays a message and then stop at the beginning of the next message .)

То	Do this
stop at the current position	Press ►■ or ■STOP.  To resume playback from that point, press ►■ again.
go back to the beginning of the current message	Press ▲ once.*
skip to the next message	Press ▼ once.*
go back to previous messages/skip to succeeding messages	Press ▲ or ▼ repeatedly.  (During stop mode, keep the key pressed to skip the messages continuously.)

	press = again.
go back to the beginning of the current message	Press ▲ once.*
skip to the next message	Press ▼ once.*
go back to previous messages/skip to succeeding messages	Press ▲ or ▼ repeatedly.  (During stop mode, keep the key pressed to skip the messages continuously.)
* These operations are for when "E	asy Search" in the menu is set to "OFF".

## Operating the Menu

During stop, playback or recording, you can use the menu to change the operation modes in playback and recording, display mode, or other settings Display the menu and change the settings as follows:

Do this
Press ◀ (MENU).
Ø/\(\delta\) ). Press \(\Delta/\V\) and press \(\Delta\) \(\Delta\).
Press <b>▲/▼</b> and press <b>▶■</b> .
Press ▲/▼ to select "⊋" and press ▶■. (If "⊋" does not appear, press ◀.)
Press $\blacktriangle/\blacktriangledown$ and press $\blacktriangleright\!\!\!-\blacksquare$ .
Press ■STOP.

You can set the recording mode (bit rate):

monaural even in the "ST" or "STLP" recording mode.

eliminating recording from soundless period.:

during playback.

You can set the playback speed:

ON:

To record dictation or in a noisy place.

You can record with high-quality stereo sound. (48 kbps)

You can record with stereo sound for longer time. (24 kbps)

You can record for longer time (monaural sound). (8 kbps)

**Note:** When the DIRECTNL switch is set to "ON", a message will be recorded in

To record at meetings or in a quiet and/or spacious place.

You can activate or disable the VOR (Voice Operated Recording) function for

Recording starts when the unit detects sound and "VOR" is displayed.

The VOR function is disabled. Normal recording operation is selected.

You cannot add a recording to avoid erasing a message by accidental

You can adjust the speed of the playback between twice the normal speed

You can go back for approx. 3 seconds by pressing ▲ (► ), or advance for

You can go back or forward the messages by pressing **△/▼** (**I◄◄** /**▶►I**).

The unit plays back a message repeatedly until you press ▶■ or ■STOP.

One MSG: The unit plays back one message and then stops at the beginning of the next

Add REC: You can adds a recording to a previously recorded message during playback.

Overwrite: You can adds an overwrite recording to a previously recorded message

**Note:** VOR function is affected by the sound around you. Set the "Mic Sense" according

to the recording conditions. If recording is not satisfactory after you have changed the

microphone sensitivity, or for important recording, set the "VOR" to "OFF".

You can enable or disable the adding or overwrite recording mode:

Messages will be played back at normal speed.

(+100%) and half the normal speed (-50%)

approx. 10 seconds by pressing ▼ (►►).

Cont Play\*: The unit plays back all messages in a folder continuous

Repeat MSG" and "\( will be displayed.

You can erase the selected folder and the messages contained in the folder

You can activate or disable the easy search function:

You can set the playback mode when you press ►■:

You can erase the currently selected message.

(None\*/ $\triangle$ / $\triangle$  $\triangle$ ) (See the reverse side.)

You can erase all the messages in the selected folder.

You can format a "Memory Stick". (See the reverse side.)

You can set the alarm to the currently selected message.

You can add a new folder to the end of the current drive

You can change the display mode on the display window

Voice Editor software.

You can turn on or off the beep.

playback.

You can set the clock manually or automatically:

(See "Step 2: Setting the Clock".)

Displays the remaining time indication.

You can add priority marks (A) to the currently selected message

Usually the recorded messages are lined up in the order of recording.

You can move the currently selected message to the desired folder.

You can change the icon and name of the currently selected folder

Displays the elapsed playback/recording time of one message (counter).

Automatic: If the unit is connected to a PC while the supplied Digital Voice Editor is

Displays the window to set the clock manually (05Y1M1D\*).

A beep will sound to indicate that operation has been accepted.

No beep sound will be heard except for the alarm.

You can turn on or off the OPR (operation) indicator during operation

You can select the list view or one message view in the stop mode.

A message is displayed in the stop mode.

"OK" shows the setting can be changed and "-" shows the setting cannot be changed.

List of the messages is displayed in the stop mode.

Displays the message name (title) if it is specified with the supplied Digital

operating, the clock is automatically set according to the PC internal clock.

The OPR indicator lights or flashes during operations such as recording or

to "OFF", the indicator lights when the unit is connected to the PC.)

You can turn on or off the backlight on the display window during operation

The backlight on the display window lights during operation. The backlight on the display window turns off during operation.

\*\*Displays whether you can change the setting in each operation mode (Stop: stop mode/Play: playback mode/Rec: recording mode):

The OPR indicator turns off even during operation. (Even if you set the LED

Recording pauses when no sound is heard and "VOR Pause" is displayed.

You can record with better sound (monaural sound). (16 kbps)

Menu items Settings (\*: Initial setting)

ந Record/play menu

DPC

iii Erase menu

Erase AllMSG

Erase Folder

Edit menu

Format

Alarm

Add Folder

Edit Folder

Date&Time

Beep

LED

Backlight

**⊞** Preferences menu

OFF:

OFF:

OFF:

How the display changes in ₽ REC Mode ■ Mic Sense VOR Entering the

Searching forward/backward

during playback (Cue/Review

• To search forward (cue): Keep ▼ pressed during playback and

release the key at the point you

Keep  $\blacktriangle$  pressed during playback

If you keep  $\nabla$  or  $\triangle$  pressed, the unit

During cue/review, the counter will

When fast playback is done to the

end of the last message, "Message

End" flashes for 5 seconds. (You

cannot hear the playback sound.)

"Message End" is flashing, the

messages are played back rapidly and normal playback will start at

flashing and the OPR indicator goes

the point you release the key.

When "Message End" stops

off, the unit will stop at the

beginning of the last message

· If the last message is long and you

wish to start playback at a later par

of the message, keep ▼ pressed to

play back the message to the end

and then press ▲ while "Message

End" is flashing to go back to the

• For messages other than the last

Listening in better sound

not supplied) to the  $\Omega$ 

disconnected.

(headphones) jack.

one, go to the beginning of the next

message and play backward to the

You can enjoy better sound quality as

• To listen from headphones: Connect

the stereo headphones (supplied or

(headphones) jack. The built-in

•To listen from an external speaker

speaker (not supplied) to the  $\Omega$ 

speaker will be automatically

Connect an active or passive

desired point.

desired point

If you keep ▲ pressed while

is done to the end of the last

and release the key at the point you

wish to resume playback.

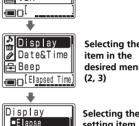
• To search backward (review):

wish to resume playback.

starts to search at higher speed.

be displayed, regardless of the

display mode setting



MSG Name

# desired menu

Stop/Play/Rec\*\*

OK/-/-

OK/-/OK

OK/-/OK

OK/-/-

OK/OK/-

OK/OK/-

OK/OK/-

OK/-/-

OK/-/-

OK/-/-

OK/OK/-

OK/OK/-

OK/-/-

OK/-/-

OK/-/-

OK/OK/OK

OK/-/-

OK/OK/OK

OK/-/OK

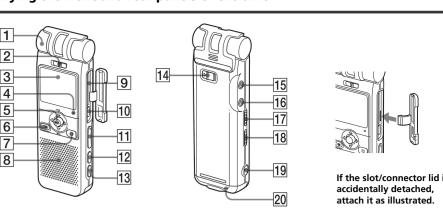
OK/OK/OK

nenu mode (1)

Press to specify the beginning and ending points of the portion to be played back repeatedly

## Index to Parts and Controls

#### Identifying the front and rear panels of the unit



14 HOLD switch To prevent accidental operation, slide this switch to

(directional/all-directional) You can set the directivity with the DIRECTNL switch 2, and sensitivity with the "Mic Sense" in

2 DIRECTNL (directional) ON (MONO)/OFF switch Slide the switch to set the directivity of the built-in microphone 1 as follows: ON (MONO): To record a sound centering on a specific direction in monaural. Use this position

1 Built-in monaural/stereo microphone

when you record a sound at a conference/ meeting or in a spacious place etc. OFF: To record a sound not centering on a specific direction (all-directional recording).

• In the ST and STLP mode, sound is recorded in higher

• The DIRECTNL switch is set to "ON", sound is recorded in monaural even if you select ST or STLP

quality sound thanks to their higher bit rates even in the monaural recording. 3 Display window

For the details, see "Using the display window" 4 OPR (operation) indicator The indicator lights in red during recording or in green during playback. It flashes in red during recording pause. During accessing the data, it lights

indicator with the "LED" in the menu.  $\blacktriangleleft$  (MENU)/ $\blacktriangleright$  ( $\stackrel{\triangle}{\square}$ : folder) $\blacktriangle$ ( $\blacktriangleright\blacktriangleleft$ : review)/ $\blacktriangledown$ ( $\blacktriangleright\blacktriangleright$ ): fast

or flashes in red or orange. You can turn off the

forward)/►■ (play/stop•enter) 6 ●IIREC (record) /PAUSE button Press here to start and pause recording

7 ■STOP button

Press here to stop operation. Sound is heard when no headphones or active

Insert the "Memory Stick Duo" or "Memory Stick PRO Duo" here 10 USB connector

speaker are connected.

9 MEMORY STICK slot

Use the USB cable to connect a PC here 11 VOLUME (volume) +/- button Adjust the playback sound with the button

12 DIVIDE button Press to divide a message during playback. 13 A-B (repeat) button

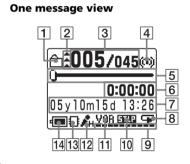
Up function. Depending on the area you purchased the unit, the

function as follows:

19 Slit for a handstrap You can attach a handstrap (not supplied) here.

20 Battery compartment /DC IN 3V jack Open the compartment lid and insert two LR03 (size AAA) alkaline batteries.

### Using the display window



1 Folder icon Displays the icon of the current folder. You can

change the icon with the "Edit Folder" in the menu. 2 Priority marks Displays the priority marks specified with the

"Priority" with the menu. You can renumber the

messages in the order of their priority. 3 Selected message number /Total number of the messages in the selected folder

4 Alarm indicator Appears when the alarm is set for a message.

5 Playback slider Displays the current playback position. 6 Counter (Elapsed time)/Remaining time / Message name indication

Elapse: Displays the elapsed playback/recording time of one message (counter). 0:07:28 05y10m15d<u>13</u>:26 Remain: Displays the remaining time of the

-0:07:28

The display mode selected with the "Display" in the

mode, and the remaining recordable time 05 y 10m15d 13:26 in the stop and recording Name: Displays the message name (title) if it is specified \(\hat{D}\) 005/045 with the supplied Digital Voice Editor. (Some

characters that are not 05y10m15d 13:26 compatible with the unit may not be displayed.) Recorded date and time indication Recorded year, month, day, hours, and minutes of

Appears when "Repeat" (one message repeat playback mode) is selected with the "Play Mode" 9 Remaining memory indicator

Displays the remaining memory

reaches 1 minute, the

remaining time

8 Repeat play indicator

the current message are displayed.

message in the playback

· During recording, the indicator decreases one by · When the remaining recording time reaches 5 minutes, the indicator flashes • When the remaining time **₾ 095**/095

#### lecording indication **6** will flash regardless of the display Remaining memory tim

• If data other than sound data is saved, the remaining memory time is displayed excluding the data. You can check the remaining memory by selecting "Remain" in the "Display" menu.
• When you set the "Beep" in the menu to "OFF", an alarm sound (beep) does not sound.

When the memory is full, recording automatically

stops and "Memory Full" will be displayed with

an alarm sound. To continue recording, first erase

#### 10 Recording mode indication Displays the current recording mode specified with the "REC Mode" in the menu:

some of the messages.

• ST: Standard play stereo recording mode STLP: Long play stereo recording mode • SP: Standard play monaural recording mode • LP: Long play monaural recording mode

#### 11 VOR (Voice Operated Recording) indicator Appears when the "VOR" in the menu is set to

"ON" and the voice operated recording is activated.

"ON". "HOLD" will appear for 3 seconds, indicating that all the functions of the buttons are locked. When the HOLD function is activated during stop, all the display will be turned off after "HOLD" is

#### To cancel the HOLD function Slide the HOLD switch to "OFF"

Even if the HOLD function is activated, you can stop the alarm playback. To stop the alarm or playback, press ■STOP. (You cannot stop usual playback.)

### 15 (headphones) jack

To monitor the recording from the built-in microphone, connect headphones supplied or not supplied here. You can adjust the volume with VOLUME +/-11, but the recording level is fixed.

If you turn up the volume excessively or place the headphones near the microphone while monitoring recording, the microphone may pick up the sound from the headphones, causing acoustic feedback (howling

16 (microphone) jack (PLUG IN POWER) You can connect an external microphone here. When an external microphone is connected, the built-in microphone is automatically cut off.

17 DPC ON/OFF switch

You can play back a message at a higher or lower speed as follows: ON: "Fast Play" or "Slow □ 005/045 Play" will be displayed and a message is played

back at the speed specified

with the "DPC" in the menu (between twice the normal speed (+100%) and half the normal speed (-OFF: A message is played back at the normal speed.

18 VOICE UP (Digital Voice Up) ON/OFF switch

more audible by enabling the Digital Voice Up

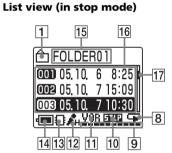
You can make the playback sound well-balanced and

ON: Digital Voice Up function is activated. Inaudible

low-level part of a recorded message is amplified

so that the overall recording is adjusted to its optimum level. OFF: A message is played back without Digital Voice

Digital Voice Up switch name shown on the unit may



12 Microphone sensitivity indication Displays the current microphone sensitivity specified with the "Mic Sense" in the menu: • H (High): To record at a meeting or in a quiet/

• L (Low): To record for dictation or in a noisy

13 Drive indication Displays the current drive: : Built-in memory drive "Memory Stick" drive

16 Messages list

17 Scroll bar

14 Remaining battery indicator Displays the remaining battery volume. When the AC power adaptor (not supplied) is connected, the indicator does not appear. 15 Folder name indication

Displays the name of the current folder. You can

change the icon with the "Edit Folder" in the menu.

Displays the list of the three messages in the current folder when "List View" in the menu is set to "ON". The number and recorded date/time of each message is displayed. You can scroll the messages with ▲/▼.

Displays the current location of the displayed messages among the whole messages in the current The effect of the back light of the display window may be

Switching the one message view and the list view You can choose how the messages will be displayed on the stop mode between list view and one message view as

press ►■. The Preferences menu is displayed.

The menu window is displayed

**1** Press **◄** (MENU).

View"

The "List View" setting window is displayed. **5** Press **△**/**▼** to select "ON" (list view) or "OFF" (one message

6 Press ■STOP to return to the normal display.

List View OFF. ON

The setting will be changed

LED Backlight **3** Press **△**/**▼** to select "List 4 Press ►■.

2 Press **▲**/▼ to select ⊕ (Preferences) and then

**≞**List View∫ OFF. view) and then press

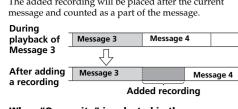
### Adding a Recording to a

**Previously Recorded Message** You can add a recording to the message being played

• At a factory setting, you cannot add a recording not to erase the message by accidental operation. To add or overwrite a recording, set the "Add/Over" in the menu to "Add REC"

• The added or overwritten portion of a message will be recorded in the same recording mode (ST, STLP, SP or LP) as the original message, regardless of the current recording mode setting You cannot add or overwrite a recording if the remaining memory is not long enough. For more information, see

"Troubleshooting When "Add REC" is selected in the menu The added recording will be placed after the current



When "Overwrite" is selected in the menu You can add an overwrite recording after the selected point in a recorded message. The part of the message after the selected point is deleted.

The starting point of an overwrite recording Message 4 The deleted part ✓ of Message 3 Message 3

Add REC?

05v1Um15d 13:2

0:07:28

Added overwrite recording in Message 3 1 During playback, press ● IIREC/PAUSE briefly.

The "Add REC?" o "Overwrite?" will appear and the unit stops in the recording stand-by mode 2 While the "Add REC?" or

"Overwrite?" appears, press ●IIREC/PAUSE The OPR indicator will turn in red. An add or overwrite recording starts.

3 Press ■STOP to stop the recording

### **Recording with an External** Microphone or Other Equipment

#### **Recording with an external microphone** Connect an external microphone to the \(^{\lambda}\) (microphone)

When you connect an external microphone, the built-in microphone is automatically cut off. When a plug in power type microphone is connected, power is automatically supplied to the microphone from the IC recorder.

mini-plug

щ

To the 🦠

(microphone) jack

(stereo)



@ Recommended types of microphones You can use the ECM-CS10 Sony electret condense: microphone (not supplied). **Recording from other equipment** 

To record sound of other equipment with the IC recorder, connect the \(^\) (microphone) jack of the IC recorder to the earphone jack of other equipment (tape recorder etc.) by using a resistance audio connecting cable. Before you start recording, set the microphone sensitivity by setting the "Mic Sense" in the menu to "High"

If you use an audio connecting cable without a resistor, sound may be recorded interrupted. Make sure to use a resistance audio connecting cable

## **Recording with other equipment**

To record the sound of the IC recorder with othe t, connect the  $\Omega$  (headphones) jack of the IC recorder to the audio or line input connector (stereo miniplug) of other equipment.

Audio

connecting

cable with

To the audio or line

input connector (stereo

(not supplied) **-----**[0] Tape recorder, etc. To the () (headphones) • Make sure that the plugs are connected securely

• We recommend you make a trial recording to check the connections and volume control. • When connecting equipment other than Sony's, refer to the instruction manual of the equipment

### **▶** Various Ways of Playback

#### Locating quickly the point you wish to start playback (Easy Search)

You can quickly locate the point you wish to start playback by pressing ▲ (►►)/▼ (►►) repeatedly during playback. This function is useful when locating a desired point in a long recording. Set "Easy Search" in the menu as follows:

ON: You can go back for approx. 3 seconds by pressing ▲ (►), or advance for approx. 10 seconds by

pressing ▼ (►►I). OFF\*: You can go back or forward the messages by pressing **▲/▼** (**I◄◄** /**▶▶I**).

### Playing back a message repeatedly — Repeat Play

#### Repeating a message Set "Play Mode" in the menu

to "Repeat" and press ►■. The "

" and "Repeat MSG" will be displayed and the selected message will be played back repeatedly.

0:07:28 To resume normal playback

Set "Play Mode" in the menu to "One MSG" or "Cont Play".

#### Playing back the specified section repeatedly — A-B Repeat

While playing back a message, you can set the start (A) and end (B) points for a section you wish to play

A-B B?

A-B Repeat

0:07:28

0:07:28

**1** During playback, press A-B (repeat) briefly. The starting point (A) of the **2** During playback, press

section you wish to play repeatedly is set. "A-B B?" A-B (repeat) briefly

The finishing point (B) of the section is set. "A-B Repeat" is displayed and the specified section is played back repeatedly.

To resume normal playback Press ►■.

message.

### To stop A-B Repeat playback Press STOP.

• You cannot set A-B Repeat for a section that overlaps two or more messages • If you do not set the finishing point (B), the finishing point

is automatically set at the end (or the beginning) of the

You can sound an alarm and start playback of a selected message at a desired time. You can have the message played back at a specified date, once every week, or the You can also sound the alarm without playing back a message.

Playing Back a Message at a

**Desired Time with an Alarm** 

6 Press ■STOP to return to

the normal display.

be renumbered. (For

example, if you erase

renumbered as Message 3.

the unit will stop at the

To erase a message partially

When erasing is completed,

beginning of the following

Message 3, Message 4 will be

First divide the message and then follow the steps on this

Display the folder or a message in the folder

Erasing all messages in a folder

You can erase all recorded messages in a folder

that you want to erase.

pressing **▲**/**▼**, and then

The cursor moves to the

3 Press **A**/**▼** to select "Erase

AllMSG" and press ightharpoonup 
ightharpoonup

The window for erasing all

"Execute" and press ightharpoonup ightharpoonup.

5 Press **▲**/▼ to select "Yes"

All the recorded messages

contained in the folder are

erased. The folder itself will

6 Press ■STOP to exit the menu mode

If a folder contains a lot of messages, it may take long to erase

You can divide a message during recording or playback

so that the message is divided into two and the new

message number is added to the divided message. By

want to play back when you make a long recording such

• Due to the recording system of an IC recorder, you may not

mark(s) will be added to both parts of the divided message

be able to divide a message in some cases. For the details,

If you divide a message with priority mark(s), priority

The recorded date and time (the starting date and time of

recording) of the divided messages are identical to the

If you divide a named message, the both parts of the

divided messages will have the same message name

• If you divide a message with an alarm setting, the alarm

setting remains only with the former message divided.

· If you divide a message to which the bookmark is set with

the supplied Digital Voice Editor, the bookmark is erased

dividing a message, you can easily find the point you

You can divide messages until the total number of

and press ►■.

not be erased.

To cancel erasing

as a meeting

Press ■STOP before step 4

**Dividing a Message** 

messages in the folder becomes 999

see "Troubleshooting".

from the divided messages

into two; however, the

without a break.

messages will be recorded

Message 1 Message 2 Message 3

• When you press DIVIDE during playback:

button, and "Dividing" appears

messages will increase by one.

for 3 seconds. The message

numbers of the following

To play the divided message

the previous folder will be erased.

1 Display the message you

want to move.

**2** Press **◄** (MENU), and

The window for selecting the

destination folder is

A message is divided.

The message is divided into two at the point you pressed the

Message 1 Message 2 Message 3

Message 1 Message 2 Message 3 Message 4

Press ▲ or ▼ to display the message number as the

**Moving Messages to a Different** 

You can move the recorded messages to another folder.

When you move a message to another folder, the one in

Example: Moving Message 3 in FOLDER01 to FOLDER03

divided messages each have message numbers.

Folder — Move Function

A message is divided.

The message numbers increase.

the messages in a folder is

The remaining

message.)

To cancel erasing

Press ■STOP before step 5

section to erase the message.

2 Press ◀ (MENU), and

press ►■.

Erase menu

displayed.

displayed.

4 Press **▲**/▼ to select

select 🏢 (Erase) by

003/009

05y10m25d 10:00

Erase a MSG

EraseFolder

EraseAlIMSG

FOLDER 1

Execute

raseAlIMSG

Execute?

Yes

No

Cancel

0:00:00

When the clock is not set or no messages are recorded, you cannot set the alarm.

**1** Display the message you want to set the alarm. 0:00:00 05y10m15d 13:26 2 Enter the alarm setting Priority ① Press **◄** (MENU), and Move MSG

select 🔗 (Edit) by [Alarm pressing **▲/▼**, and th OFF ] oress 🗖 ② Press ▲/▼ to select "Alarm" and press ►■. llAlarm The alarm setting mode ■0FF ON ③ Press ▲/▼ to select

If "ON" has already been selected, follow the next ④ Press ►■ ■Date The window to set the alarm date will be SUN displayed. MON

**3** Set the alarm date. To play back on a desired IA I a r m Press ►■ while "DATE" **05**y 1m 1d The year digits will be 0:00

selected. ② Press ▲ or ▼ to select llAlarm the year digits and press 05 y 10m**ij**d The month digits will be 0:00 selected. 3 Set the month and day

Alarm

■Date

05 y 10 m 15 d

15:**30** 

Beep

To play back once a week Press ▲ or ▼ to select the day of the week, and press ►■.

SUN MON To play back at the same Alarm time every day FRI Press ▲ or ▼ to select "DAILY", and press  $hline \blacksquare$ . SAT

4 Set the alarm time. llAlarm Press ▲ or ▼ to select the hour digits and pres The minute digits will

> ② Press ▲ or ▼ to select Alarm the minute digits and press ►■. 05 y 10 m 15 d You cannot set the alarm at a previously set date and time on another message in the built-in memory or "Memory

**5** Select the alarm playback. Alarm Press ▲ or ▼ to select the -Beep&Play alarm sound either from "Beep&Play" (for starting playback after the alarm) or 'Beep" (for only the alarm).

6 Press ►■.

The alarm setting is completed.

Press ■STOP to exit the 005/045@ menu mode. "(•)" is displayed when the 0:00:00 message having an alarm 05y10m15d 13:26 setting is displayed in one message view 

When the alarm time comes The alarm will sound for about 10 seconds and the selected message will be played back. (If you have selected "Beep", only the alarm will sound.)

When the playback ends, the unit will stop automatically at the beginning of that message. To listen to the same message again, press ►■. To stop alarm

Press ■STOP while the alarm sound is heard. You can stop even when the HOLD function is activated.

# To cancel the alarm setting or change the alarm

Select "OFF" in the steps ③-2, and then press ►■.

• If the alarm time comes while another message is being played back with an alarm, the playback stops and the new message will be played back.

• If the alarm time comes during recording, alarm will sound for 10 seconds after the recording is finished and playback begins. "(\*\*)" will flash when the alarm time comes.

• If more than one alarm time comes during recording, only the first message will be played back. When the alarm time comes when the unit is in the menu mode, alarm will sound and the menu mode will be cancelled.

• If you erase the message you set the alarm to play back, the alarm setting will be cancelled.

• If you divide a message with the playback alarm, playback will stop at the point you divided a message. • You can adjust the playback volume with VOLUME +/-.

• If the alarm time comes during erasing, alarm will sound for 10 seconds after the erasing is finished and playback begins. Alarm setting will not be cancelled after the alarm playback finishes. To cancel alarm setting, set "Alarm" to "OFF".

## **▶**Editing Messages

### **Erasing Messages**

pressing **▲/▼**, and then

The cursor moves to the

**3** Press **A**/**▼** to select "Erase

The window for erasing a

message is displayed.

4 Press **▲**/▼ to select

displayed.

a MSG" and press ►■.

"Execute" and press ►■.

The confirmation window is

5 Press **▲**/▼ to select "Yes"

The message is erased.

and press ►■.

press ►■.

Erase menu.

Once a recording has been erased, you cannot retrieve it.

Erasing messages one by one You can erase unnecessary messages one by one. When a message is erased, the remaining messages will

advance and be renumbered so that there will be no displayed. space between messages. Before erasing Erase Message 3 4 Press **▲**/**▼** to select the folder to which you want Message 1 | Message 2 | Message 3 | Message 4 | Message 5

and press ►■. The window for moving the Message 1 | Message 2 | Message 3 | Message 4 message is displayed. The message is played back from After erasing Remaining messages are the beginning. 5 Press **A**/**▼** to select "Yes" **1** Display the message you and press ightharpoonup. want to erase.

EraseAlIMSG

EraseFolder

Erase a MSG

Execute

rase a MSG

Execute?

Yes

Nο

Erase a MSG

Erasing

Cancel

3U ---

0:00:00 05y10m10d 10:30 2 Press ◀ (MENU), and menu mode. [Erase a MSG select 📺 (Erase) by

6 Press ■STOP to exit the You cannot move a message to the other drive.

### Adding Priority Mark(s) — Priority Mark Function

Usually the recorded messages are lined up in the order By adding priority mark(s) (A) to important messages, you can renumber the messages in the order of their priority. There are four levels, "AAA" (the most mportant), "▲▲", "▲", and "None" (no priority mark). You can add priority marks both in the stop mode and in

the playback mode **1** Display the message you

0:00:00 05y10m15d 13:26 Priority

The cursor moves to the Edit alarm اں، **3** Press **△**/**▼** to select ioritv "Priority" and press ►■. ■None The window for setting priority marks is displayed

4 Press **▲**/▼ to select the number of the priority marks with which you want to mark.

want to mark.

5 Press ►■. The setting is finished

The messages will be renumbered Messages with priority Messages are sorted in order of the number of priority mark(s) (▲) in a folder. Messages without a priority mark are

If there are over 2 messages with th same number of priority marks in a folder, these messages are sorted by the recorded date and time. (The oldest one comes first.)

You can also add priority mark(s) using the supplied "Digital Voice Editor" software. But messages are not sorted in order of the number of the priority marks unless you sorted by the number of priority marks using the software

e.g. When there are 3 Press **A**/**▼** to select "Edit 3 messages in a **2001/003** 0:00:00

**●0¼ ഈ** Message 1 ±002/003 0:00:00 ln5v10m15d 15:20 

**5 003**/003 |05v10m15d 10:00 **■**□/<sub>H</sub> <u>500</u> Message 3

By default setting, there are 5 folders: "FOLDER01" through "FOLDER05". You can add folders as you like. You can also delete unnecessary folders.

Adding / Deleting Folders

The maximum number of folders you can add varies depending on the using conditions. "Folder Full" is displayed in the display window when you cannot add any folder because of the system limitations of the IC recorder

Adding a folder

While recording or playing back a message, press DIVIDE at the point you want to divide. select 🔗 (Edit) by . When you press DIVIDE during recording: The new message number is press ►■. added at the point you pressed the button, and "New MSG New MSG REC REC" appears for 3 seconds 2 Press **▲**/**▼** to select "Add The message will be divided 0:07:28

→ Recording continues

0:07:28

Dividing

Folder" and press ►■. The window for creating a new folder is displayed. **3** Press **△**/**▼** to select "Execute" and press ►■.

end of the current drive. 4 Press ■STOP to exit the

"and double figures or letter like "FOLDER04" or 'FOLDERAB". If there is a missing number or letter among the folder names, the new one is labeled using the nissing number or letters automatically. You can change the folder icon and name as you like.

### Erasing a folder

**1** Display the folder you want to delete.

please check the contents. 2 Press ◀ (MENU), and select 🎢 (Erase) by press ►■. The cursor moves to the

🖺 Erase a MSG EraseAl IMSG 

**3** Press **▲**/**▼** to select "Erase Folder" and press ►■. The window for erasing the folder is displayed. 4 Press **A**/▼ to select The confirmation window is

"Execute" and press ►■. displayed.

and press ►■. The folder is erased.

5 Press **▲**/**▼** to select "Yes" 6 Press ■STOP to return to

are not changed. If "FOLDER03" is erased, for example, the

If the folder contains recorded message, "Messages in folder

will be erased" will be displayed. If you do, the folder and

Editing an Icon and Name of a

**☞** Registered templates of folder icons and names

with each other. When you select a folder icon or name, the

associated with the folder name is automatically selected.

they will no longer be associated. Some icons have no

Schedule, Meeting, Memo, ABz Trip,

Lecture, Action, ASpeech, Action,

Lesson, Message, Expense, Research,

⊗, ⊕, ☆, ❤, ♣, ◆, 亩

Changing a folder icon

folder icon.

press ►■.

2 Press ◀ (MENU), and

select 🔗 (Edit) by

pressing **▲**/**▼**, and then

The cursor moves to the Edit

Folder" and press ►■.

The window for editing a

**3** Press **△**/**▼** to select "Edit

folder is displayed.

Personal, 🖣 Idea, 🛗 Shopping, 🎝 Music, 🛗 Travel, 📠

Exhibition, 🙀 Report, 🎔 Sports, 😱 Date, 🕆 Party, 🌄

Lang.Lesson,  $\mathcal{P}$ Interview,  $\stackrel{\frown}{\frown}$ ,  $\stackrel{\frown}{\boxminus}$ ,  $\stackrel{\frown}{\boxminus}$ ,  $\stackrel{\frown}{\lnot}$ ,  $\stackrel{\frown}{\lnot}$ ,  $\stackrel{\frown}{\diamondsuit}$ ,

Folders have been automatically attached with the folder

1 Display the folder you want to change the

icon "\(\begin{aligned} \text{". You can select the desired folder icon from the } \)

Priority

alarm

Icon

Name

Move MSG

Edit Folder

None

Folder icons and names registered as templates are associated

folder name associated with the folder icon, or the folder icon

When you re-select or edit the identical folder icon and name

You can label an icon or name of a folder yourself

name of "FOLDER04" will remain the same.

the contained messages are erased.

♣ Priority select ⊘ (Edit) by pressing

△/▼, and then press ►■. the normal display. The cursor moves to the Edit Alarm To cancel erasing Mone] Press ■STOP before step 4 Press ▲/▼ to select "Move Priority and press ►■. • You cannot delete the last folder left in a drive. • After deleting a folder, the name of the remaining folders

Folder

Move MSG alarm Move MSG 🖰 FOLDER01 ∸ FOLDER02 亡 FOLDER03

Yes

No

002/002

05y10m10d 15:10

0:00:00

to move the message to Move MSG Execute?

The message is moved to the destination folder. Messages are sorted in order of the recorded date and time.

0:00:00 05y10m10d 15:10 

4 Press **▲**/▼ to select "Icon"

folder icon is displayed.

The cursor moves to the

direction you press the key

When you keep pressing ▲/

▼, you can scroll the pages.

The folder is labeled with the

Changing a folder name

2 Press ◀ (MENU), and

press -

select 🔊 (Edit) by

pressing  $\blacktriangle/\blacktriangledown$ , and then

The cursor moves to the Edi

Folder" and press ►■.

The window for editing a

'Name" and press ▶■.

The window for selecting a

folder name is displayed.

folder name and press

The folder is labeled with th

You can also label a folder using the supplied "Digital Voice

Voice Editor. Some characters that the unit does not support

**►** Expanding the Memory with the

Inserting the "Memory Stick"

Stick Duo" or "Memory Stick PRO Duo" into the

Do not insert or remove the "Memory Stick" while a

oing so may cause malfunction of the unit.

Make sure to insert the "Memory Stick" firmly.

may cause malfunction of the unit

time (initializing the memory)

automatically.

below.

may damage the data.

"ACCESS" appears in the display window

FOLDER05) will be made in the "Memory Stick"

message of the built-in memory is recorded or played back.

• Do not insert a "Memory Stick" in a different direction. It

When you insert the "Memory Stick" for the first

urchasing or one with no data, 5 folders (FOLDER01 to

Notes while "ACCESS" appears

• The unit is accessing data while "ACCESS" appears in the

display window or the OPR indicator lights or flashes in red

or orange. While accessing, do not remove the "Memory Stick", the batteries or AC adaptor (not supplied). Doing so

If the unit is required to process excessive amount of data, "ACCESS" may be displayed for an extended period of

time. This is not a malfunction of the unit. Wait until the

Make sure that "ACCESS" disappears, and the unit is in

the stop mode. Then push the "Memory Stick" into the

unit. When it pops out, remove it from the slot as shown

Removing the "Memory Stick"

You can expand the memory by inserting the "Memory

Editor" software. For the details, see the help of the Digital

**5** Press **△**/**▼** to select a

6 Press ■STOP to exit the

selected name and its

associated icon.

will not be displayed properly.

"Memorv Stick"

MEMORY STICK slot.

folder is displayed.

4 Press **▲**/▼ to select

Depending on the folder icon you choose, there is no

associated name. If you edit folder icons and names, folder

Folders have been labeled automatically with double

you can label folders as you like by using template

1 Display the folder you want to change the

figures or letter like "FOLDER04" or "FOLDERAB", but

The setting is finished

7 Press ■STOP to exit the

selected icon and its

associated name.

The window for selecting a

and press  $\blacksquare$ .

folder icon

 $(\triangle/\nabla/\blacktriangleleft/\triangleright)$ 

6 Press ►■.

☐ FOLDER01

001/012

05y10m 7d 15:09

Priority

Move MSG

None.

Edit Folder

Name

C FOLDERO 1

Schedule

Meeting

**0001** 05.10. 7 15:09

003 05.10.25 10:00

In the list view

Memo

I ☐ Memo

alarm

0:00:00

2 Press ◀ (MENU), and None

Priority ■None

6 Press ■STOP to exit the menu mode

moved behind the messages 05y10m15d 13:26 with priority mark(s).

0:00:00

#### ► Handling Folders

pressing **▲**/**▼**, and then The cursor moves to the Edi

aAlarm Mone l Move MSG Alarm AddFolder

Priority

Move MSG

Add Folder Execute Cancel

menu mode. About added folder names The new folder is labeled automatically with the icon

Once a folder has been erased, you cannot retrieve it. When erasing a folder that contains recorded messages,

pressing **▲/**▼, and then



Cancel

<u>Erase Folder</u>

Execute?

Yes

No

# Execute

messages* (in a "Memory Stick")				
	ST**	STLP**	SP**	LP**
32MB	1 h. 25 m.	2 h. 45 m.	4 h. 20 m.	11 h. 45 m.
64MB	2 h. 50 m.	5 h. 35 m.	8 h. 50 m.	23 h. 35 m.
128MB	5 h. 50 m.	11 h. 10 m.	17 h. 45 m.	47 h. 25 m.
256MB	11 h. 10 m.	21 h. 35 m.	34 h. 10 m.	91 h. 10 m.
512MB	22 h. 5 m.	42 h. 35 m.	67 h. 25 m.	179 h. 45 m.
1GB	44 h. 55 m.	86 h. 25 m.	136 h. 50 m.	364 h. 55 m.
2CB	92 h 10 m	177 h 25 m	280 h 50 m	749 h 5 m

(h.: hours/m.: minutes) \* In continuous recording/playback \* In approximate hours and minutes

\* The maximum number of messages in a folder is 999. When there are 5 folders in the "Memory Stick", you can record up to 1,012 messages. \*Recording modes: ST: Standard play stereo recording mode/STLP: Long play

stereo recording mode/SP: Standard play monaural recording mode/LP: Long play monaural recording mode When you use the "Memory Stick", the battery life may be

The above table shows the recording time when you use the

"Memory Stick" for use with ICD-MX20 only and by the initial setting with 5 folders. The maximum recording time and number of messages may differ depending on the using onditions. The maximum recording time of a "Memory Stick Duo" varies depending of the media type.

Using the "Memory Stick" (not supplied) with the unit When you purchase "Memory Stick", make sure that you select "Memory Stick" with a logo MEMORY STICK DUD or a logo MEMORY STICK PRO DUD.

Even with either of the logos, however, some

"Memory Stick" cannot be used with the unit. For

details, see the Sony product information "Memory

## Stick" web site. About the "Memory Stick"

What is "Memory Stick"?

"Memory Stick" is small, light-weighted, and nextgeneration IC storage media with a larger capacity than a floppy disc. You can use the "Memory Stick" to exchange data among "Memory Stick" compatible devices. In addition, you can use the "Memory Stick" as a removable external storage device to save your data. In a "Memory Stick", you can save image data from other device in addition to the sound files of the IC recorder. Sizes of "Memory Stick"

There are two sizes of "Memory Stick": regular size

"Memory Stick" and compact size "Memory Stick Duo".

With a Duo adaptor, you can use "Memory Stick Duo" on a device supporting regular size "Memory Stick". For ICD-MX20, use a "Memory Stick Duo" or "Memory Stick PRO Duo" (compact size "Memory Stick Duo"). Types of "Memory Stick" Following types of "Memory Stick" are available for versatile

can be used only with "Memory Stick PRO" compliant

purposes. "Memory Stick Duo" and "Memory Stick PRO Duo" are the only media supported by ICD-MX20. "Memory Stick PRO": "Memory Stick PRO" employs the "MagicGate" copyright protection technology and

"Memory Stick-R": Data stored in "Memory Stick-R" cannot be overwritten. It can be used on "Memory 3 ... 🗈 🛨 🛭 Stick-R" compatible devices. You cannot store data ## B O O ! with "MagicGate" copyright protection technology. "Memory Stick": "Memory Stick" can store all types

| 🖰 😘 🗗 🖺 🦁 of data except for the one that requires the 5 Press ▲/▼/◀/▶ to select a ☐ FOLDER01 "MagicGate" copyright protection technology "Memory Stick" (MagicGate/High-Speed Transfer Compatible): "Memory Stick" (MagicGate/High-53 m 🖹 🛨 🕏 Speed Transfer Compatible) employs "MagicGate 品品区面: copyright protection technology and supports high-|A 🕶 🗗 🕳 speed data transfer. It can be used with all the 'Memory Stick"-compatible devices. (Data transfer

speed depends on the "Memory Stick"-compatible device.) "MagicGate Memory Stick" : "MagicGate Memory Stick "employs the "MagicGate" copyright protection

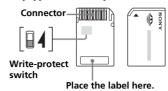
technology "Memory Stick-ROM": "Memory Stick-ROM" is the read-only "Memory Stick" storing the data. You

cannot save or delete its data

What is "MagicGate"? "MagicGate" is a copyright protection technology for "MagicGate Memory Stick" and compliant products. The unit does not support the "MagicGate" standards and cannot read or write the data subject to the "MagicGate" copyright protection.

### Notes on use

· When you slide the write-protect switch to the write protect position, you cannot record, edit, or delete the data. (Some types of "Memory Stick Duo" are not equipped with write-protect switch.)



· Avoid removing the "Memory Stick" from the unit while the unit is reading or writing data.

 Data may be damaged in such occasions: · While the unit is reading or writing data, the "Memory Stick" is removed or the batteries are removed. Or the AC power adaptor (not supplied)

- The "Memory Stick" is used in a location subject to electrostatic or electronic noises. We recommend that you save backup of the important

Notes on formatting (initializing) "Memory Stick" is shipped with a FAT format as the standard format. To format "Memory Stick", use devices conformable with the "Memory Stick". When you format "Memory Stick", always perform the procedures in "Formatting the Memory"

We cannot guarantee operations if the "Memory Stick" is formatted on your PC

About the minimum recording unit When recording a message in the "Memory Stick", the relevant information of the message, the number of folders, or others is recorded in addition to the message itself. As the number of messages or folders increase, the remaining memory reduces accordingly To record a message or add a folder, you need the time of the minimum recording unit. Although the actual recording time of a message may be less than that of the minimum recording unit, the time of the message is counted as a minimum recording unit. If the remaining recording time of the inserted "Memory Stick" is less than that of the minimum recording unit, you cannot add a message or a folder in the "Memory

#### The m um recording unit in each recording

8 seconds	You cannot record messages up to the		
8 seconds	maximum recording time.		
8 seconds	<ul> <li>If you record messages in a mixture of ST, STLP, SI</li> </ul>		
22 seconds	<ul> <li>and LP modes, the recordable time varies from the</li> <li>maximum ST mode recording time to the maximum</li> </ul>		
	LP mode recording time.		

EraseFolde

≰ Format

(**----**

Built-in

MemoryStick

Format

lFormat

Format

-ormat

Execute

Execute?

Yes

No

7<del>...</del>

Formatting

Cancel

### **▶** Other Operations

**Formatting the Memory** 

STLP

You can format the built-in memory and a "Memory Stick Duo" or "Memory Stick PRO Duo" inserted in the MEMORY STICK slot. Formatting will delete all the data recorded in the memory including images and other data. Before formatting, check the data in the memory.

Because a commercially available "Memory Stick" has already been formatted at the factory, you do not need to format a **1** Press **◄** (MENU), and 🛂 EraseAlIMSG select 📺 (Erase) by

pressing **▲/**▼, and then press ►■. The cursor moves to the Erase menu. 2 Press **▲**/**▼** to select "Format" and press ►■. The window for selecting the

memory to be formatted is displayed. When the "Memory Stick" is not inserted, this window does not appear. Skip to step 4. **3** Press **△**/**▼** to select the

media ("Built-In" or "Memory Stick") that you want to format and press The window for executing format is displayed. **4** Press **▲**/**▼** to select

"Execute" and press ►■. The confirmation window is displayed.

5 Press **A**/**▼** to select "Yes" and press ightharpoonup. Formatting of the selected media starts

first time after purchasing.

To cancel formatting

6 Press ■STOP to return to the normal display After formatting, 5 folders (FOLDER01 to FOLDER05) are automatically made in the memory in the same way when you insert batteries for the

Select "Cancel" in step  $\bar{4}$  or "NO" in step 5. You cannot format when the write-protect switch on the "Memory Stick" is set to "LOCK".

Using the "Digital Voice Editor' Software

By connecting the IC recorder to your computer, you can use the "Digital Voice Editor" software to do the following: • Saving the IC recorder messages on your computer's

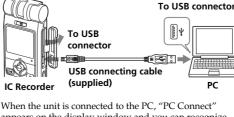
software. • Transcribing your IC recorder message using Dragon NaturallySpeaking® speech-recognition software (not supplied). For the details, see the supplied "Digital Voice Editor 2" software operating instructions

Transferring the PC messages back to the IC recorder

· Playing or editing the messages on your computer.

• Sending a voice e-mail message using MAPI e-mail

Use the USB connecting cable supplied to connect the USB connectors of the IC recorder and your computer.



appears on the display window and you can recognize he IC recorder with your PC. When you connect the unit to your PC, the built-in memory is recognized as an IC recorder and the "Memory Stick" is

ecognized as a removable disk. You can use Windows Explorer to display the data stored in the built-in memory or "Memory Stick". When playing, editing, or saving a message, however, please make sure to use the supplied Digital Voice To set the clock of the unit automatically

connect the unit to the PC after the Digital Voice Editor is

Set "Date&Time" in the menu to "Automatic" and

started. The clock of the unit is automatically set

according to the internal clock of your PC.

 Sound board: Sound Blaster 16 compatible - Display: High color (16 bits) or more and 800 x 480 OS: Microsoft<sup>®</sup> Windows<sup>®</sup> XP Media Center Edition 2005/Windows® XP Media Center Edition 2004/ Windows® XP Media Center Edition/Windows® XP

System requirements

IBM PC / AT or compatible

CD-ROM drive

dots or more

USB port

following minimum requirements

RAM: 64MB or more

CPU: 266MHz Pentium® II processor or higher

- Hard disk space: 70MB or more depending on the

size and number of sound files you store

Professional/Windows® XP Home Edition/

Windows® 2000 Professional/Windows® Millennium

Edition/Windows® 98 Second Edition standard

Windows® 98, Windows® 95 or Windows® NT.)

You cannot use the software with a Macintosh machine

system is installed or upgraded by the user, or a compute

with multi-boot operating environment are not supported

Operate the unit only on 3 V DC. Use two LR03 (size

· Do not leave the unit in a location near heat sources, or

in a place subject to direct sunlight, excessive dust or

Should any solid object or liquid fall into the unit.

remove the batteries and have the unit checked by

qualified personnel before operating it any further

· Noise may be heard when the unit is placed near an

AC power source, a fluorescent lamp or a mobile

Noise may be recorded when an object, such as your

moistened in water. Do not use alcohol, benzine or

If you place a magnetic card near the speaker of the

unit, the card may be affected by the magnet of the

If you have any questions or problems concerning your

recorder, we recommend that you save a backup copy

of your recorded messages on a tape recorder or to a

unit, please consult your nearest Sony dealer.

To avoid potential risk of data loss caused by

accidental operation or malfunction of the IC

There may be other formatted data (for example

Since you need the minimum recording unit to record

a message even shorter than the minimum recording

unit, the actual total recording time may become

shorter than the maximum recording time of the IC

No more recording can be made when 999 messages

the counter (elapsed time) and the remaining time

becomes shorter than the maximum recording time of

• You cannot divide a message in a folder which has 999

Due to the limitation of the IC recording system

The maximum recording time varies depending on the

mentioned above, the sum of the total recorded time in

images) in the memory

number of folders or messages

You cannot divide a message.

each have been recorded in a folder.

recorder.

speaker and may become unusable. Please keep a

magnetic card away from the unit.

**Backup recommendations** 

finger, etc., rubs or scratches the unit during recording.

phone during recording or playback.

· To clean the exterior, use a soft cloth slightly

• Do not operate the unit while driving, cycling or

operating any motorized vehicle.

• A handmade computer, a computer whose operating

**▶** Other Information

**Precautions** 

On safety

On handling

On noise

mechanical shock.

On maintenance

computer, etc.

thinner.

AAA) alkaline batteries

installation (You cannot use this software with

Frequency rang • ST: • LP:

60 Hz - 7,000 Hz

350 mW

Speaker approx. 2.8 cm  $(1^{1}/_{8}$  in.) dia

impedance microphone

 USB connector • DC IN 3V jack

+100% to -50% Two LR03 (size AAA) alkaline batteries: 3 V

Mass (including batteries 96 g (3.4 oz) (1)/For the application software (1))

> USB connecting cable (1) Application Software (CD-ROM) (1) LR03 (size AAA) alkaline batteries (2) Carrying pouch (1) Dragon NaturallySpeaking® Preferred (Version 8.0) CD-ROM(1) supplied only with ICD-MX20VTP sold in the USA

Active speaker SRS-T88, SRS-T80/Electret condenser microphone ECM-CS10, ECM-TL1/ Audio connecting cable RK-G134HG, RK-G135HG, RK-G136HG, RK-G139HG (excluding Europe)/AC power adaptor AC-E30HG (excluding the models for Korea, the People's Republic of China, Australia, and New Zealand),/"Memory Stick Duo" MSH-M32N (32 MB), MSH-M64N (64 MB), MSH-M128N (128 MB)/"Memory Stick PRO Duo MSX-M256S (256 MB), MSX-M1GST (1 GB)/ High Speed "Memory Stick PRO Duo" MSX M256N (256 MB), MSX-M512N (512 MB), MSX-

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed

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respective holders. Furthermore, "TM" and "®" are no The "Digital Voice Editor" uses software modules as

#### If you divide messages frequently, the unit may become unable to divide a message.

If an Error Message is displayed If the following error messages are displayed, do the remedies described here.

### Should any problem persist after you have made these checks, consult your nearest Sony dealer.

Alarm already set for the same time. • You set the alarm to play back a message at the date and time previously set on another message. Change the alarm setting.

#### **Battery Low** Batteries are weak. Replace batteries with new ones. When the remaining batteries are short, you cannot erase a message or format the memory.

Data not supported • The file is not supported by the unit, or the file itself is corrupted.

### Folder/File is protected.

File not supported

 Messages have been set to "Read-only" in the computer. You cannot edit or erase "Read-only" messages and folders. Remove the check for "Readonly" under "Properties" of files. **Maximum Folders** 

• Because there are already the maximum number of

The unit does not support the file type of the selected

message. You cannot play back or edit the file.

#### folders in the selected drive, you cannot add a folder. Delete some unnecessary folders. Or switch to the drive with sufficient memory space

Maximum Messages: Folder Full

• Because there are already 999 messages in the selected folder, vou cannot add a message. Erase some messages before adding or dividing a message. Memory Full

• The remaining memory of the built-in memory or the

"Memory Stick" is too small. Erase some messages

#### • Insert the "Memory Stick" again. After inserting, if this message is displayed again, the inserted "Memory Stick" may be out of order

Memory Stick is locked.

Memory Stick Error

before recording.

format in this condition. Slide the switch to the writable position. No Folder/Message • The selected folder does not have any messages. Or,

the selected drive does not have any folders. Without

messages or folders, you cannot set the alarm or do

• The write-protect switch on the inserted "Memory

Stick" is set to "LOCK". You cannot record, edit or

#### Only one folder remains. You cannot erase the last folder remained in the drive.

Past date and time. • You set the alarm at the past date and time. Set the alarm at an appropriate date and time. Please format with the unit.

#### You cannot use the "Memory Stick" formatted with other devices . Use the "Format" in the menu to format the "Memory Stick".

**Power Supply Problem** • An AC power adaptor that is not compatible with the IC recorder is connected. Make sure to use the AC power adaptor for the unit (not supplied). Or insert

### • Batteries are weak. Replace batteries with new ones.

Replace Batteries

Read-only Memory Stick • The "Memory Stick" has been set to "Read-only". You cannot edit or erase messages of a "Read-only"

"Memory Stick". Release the "Read-only" setting.

• The IC recorder failed in memory access because the

memory is corrupted or a system error occurred.

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#### ur computer and system software must meet the **Specifications**

Recording media Built-in flash memory 32MB/"Memory Stick Duo", Stereo/Monaural recording Recording time

1 hours 25 minutes • ST: • STLP: Approx. 2 hours 45 minutes Approx. 4 hours 20 minutes • LP: Approx. 11 hours 45 minutes

60 Hz - 13,500 Hz

• STLP: 60 Hz - 7,000 Hz 60 Hz - 3,500 Hz

Power output Input/Output • Microphone jack (minijack, stereo)

#### input for plug in power, minimum input level 0.6 mV, 3 kilohms or lower Headphones jack (minijack, stereo)

### - output for 8 - 300 ohms headphones • "Memory Stick Duo" slot

Playback speed control (DPC)

Dimensions (w/h/d) (not including projecting parts and  $36.6 \times 107.5 \times 16.9 \text{ mm} \left(1^{1}/_{2} \times 4^{1}/_{4} \times {}^{11}/_{16} \text{in.}\right)$ 

Operating instructions (For the IC recorder Stereo headphones (1) (excluding Europe

M1GN (1 GB), MSX-M2GN (2 GB) /PC Card Adaptor for Memory Stick MSAC-PC3

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